

Current Listing of the Claims, as presently amended:

1. (Currently Amended) A method of developing ~~determining~~ therapeutic strategies and/or targets for treating disorders relating to body weight by examining weight loss in an individual, the method comprising: (a) establishing at least three groups of subjects; (b) administering to the individual a prolonged overfeeding regimen to a first group, administering a volume-matched infusion to a second group, and administering a volume-matched infusion to a third group; (b) terminating the prolonged overfeeding regimen to the first group, terminating the volume-matched infusions to the second group and terminating the volume-matched infusions to the third group; (c) providing free access to food to the first group, providing free access to food to the second group, and providing pair-fed access to food to the third group, wherein the third group is pair-fed with the first group; and (d) identifying gene and/or protein expression in the first group, identifying gene expression in the second group, and identifying gene expression in the third group, and; (e) subjecting the gene expressions to an analysis that occur in the individual with the prolonged overfeeding regimen.
2. (Currently Amended) A method according to claim 1, wherein the ~~individual~~ first group receives calories directly into the stomach during administration of the prolonged overfeeding regimen and the second and third groups receive the volume-matched infusions directly into the stomach during the administration of the prolonged overfeeding regimen of the first group.
3. (Currently Amended) A method according to claim 2, wherein the prolonged overfeeding regimen and volume-matched infusions are ~~is~~ administered through a gastric catheter.
4. (Currently Amended) A method according to claim 1, wherein the gene ~~and/or protein~~ expression is ~~expressions are~~ identified during or after the prolonged overfeeding regimen.

5. (Currently Amended) A method according to claim 4, wherein a referenced gene ~~and/or protein~~ expression is identified before the prolonged overfeeding regimen.
6. (Currently Amended) A method according to claim 1, wherein the gene ~~and/or protein~~ ~~expression is~~ expressions are identified in a tissue sample.
7. (original) A method according to claim 6, wherein the tissue sample comprises brain tissue, stomach tissue, intestine tissue, white fat tissue, brown fat tissue, muscle tissue, pancreas tissue, pituitary tissue, liver tissue, bone tissue or combinations thereof.
8. (original) A method according to claim 7, wherein the brain tissue comprises hypothalamus tissue, brainstem tissue, midbrain tissue, forebrain tissue or combinations thereof.
9. (Currently Amended) A method according to claim 1, wherein identifying gene ~~and/or protein~~ expression ~~that occur in an individual with the prolonged overfeeding regimen~~ comprises:
 - a. collecting a tissue sample ~~from the individual~~;
 - b. isolating RNA, DNA, or protein or combinations thereof from the tissue;
 - c. determining a level of expression of the isolated RNA, DNA, protein or combinations thereof;
 - d. analyzing the level of expression.
10. (original) A method according to claim 9, wherein determining the level of expression comprises:

- a. preparing a probe using the isolated RNA, DNA, protein or combinations thereof,
- b. applying the probe to an array, and
- c. measuring the level of the RNA, DNA, protein, or combinations thereof, of the array.

11. (original) A method according to claim 9, wherein analyzing the level of expression comprises performing bioinformatic analysis.

12. (original) A method according to claim 11, wherein bioinformatic analysis comprises statistical analysis, class prediction, clustering, computer programs, or combinations thereof.

13. (Currently Amended) A method of ~~developing~~ determining therapeutic strategies and/or targets for ~~treating~~ wasting disorders in an individual, ~~the method comprising:~~ (a) establishing at least three groups of subjects; (b) administering to the individual a prolonged overfeeding regimen to a first group, administering a volume-matched infusion to a second group, and administering a volume-matched infusion to a third group; (b) terminating the prolonged overfeeding regimen to the first group, terminating the volume-matched infusions to the second group and terminating the volume-matched infusions to the third group; (c) providing free access to food to the first group, providing free access to food to the second group, and providing pair-fed access to food to the third group, wherein the third group is pair-fed with the first group; and (d) identifying gene and/or protein expression in the first group, identifying gene expression in

the second group, and identifying gene expression in the third group, and; (e) subjecting the gene expressions to an analysis ~~that occur in the individual with the prolonged overfeeding regimen.~~

14. (New) A method of developing therapeutic strategies and/or targets for treating disorders relating to body weight by examining weight loss, the method comprising: generating subjects having a positive energy balance by an involuntary overfeeding regimen; terminating the involuntary overfeeding regimen; and identifying gene expression during a period of time following the termination, wherein the subjects return to a neutral energy balance during the period of time.